LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-6. (Canceled)

7. (Currently amended) A method of scheduling packets for delivery to one of mobile stations and a corresponding base station in a wireless packet network comprising the iterative steps of:

calculating channel efficiency for a mobile station (i); and

scheduling packets for delivery to said mobile station (i) or said base station by determining a value of relative weight of said mobile station (i) by a weighting equation, responsive to the calculated channel efficiency, wherein said weighting equation is given by:

$W_i = efficiency_i^{exponent}$,

wherein exponent denotes a real number, wherein $efficiency_i$ denotes said channel efficiency, and W_i denotes said value of relative weight of said mobile station (i).

8. (Original) A method as recited in claim 7 wherein the value of weight given said mobile station may be multiplied by a multiplier.

9. (Original) A method as recited in claim 7 wherein the value of weight given said mobile station may vary by a value given said exponent.

10. (Original) A method as recited in claim 9 wherein the value given said exponent is adjustable by an operator of said base station.

11. (Canceled)

12. (Currently amended) A method of scheduling packets for delivery to one of mobile stations and a corresponding base station in a wireless packet network comprising the iterative steps of:

calculating channel efficiency for a mobile station; and

scheduling packets for delivery to said mobile station or said base station by determining a value of relative weight of said mobile station by a weighting equation, responsive to the calculated channel efficiency, wherein users with higher channel efficiency receive a lower weight than users with a lower channel efficiency.

13.-15. (Canceled)

16. (Previously Presented) A method as recited in claim 9 wherein a weight for said base station is determined according to selecting a value of said exponent along a horizontal axis of values from a minimum of minus two to a maximum positive value.

17. (Original) A method as recited in claim 16 where the minimum value of exponent is set at minus one.

18.-22. (Canceled)

23. (Currently Amended) A base station apparatus for use in a wireless packet network comprising:

a processor for calculating channel efficiency for a mobile station (i); and scheduling packets for delivery to said mobile station (i) by periodically determining a value of relative weight of said mobile station (i) by a weighting equation, responsive to the calculated channel efficiency, wherein said weight is determined by the equation:

$W_i = efficiency_i^{exponent}$

wherein exponent denotes a real number, wherein $efficiency_i$ denotes said channel efficiency, and W_i denotes said value of relative weight of said mobile station (i).

24.-25. (Canceled)

26. (Previously Presented) The base station apparatus as recited in claim 23 wherein a weight for said base station is determined according to selecting a value of said exponent along a horizontal axis of values from a minimum of minus two to a maximum positive value.